IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1.   (currently amended) A system ~~System~~ for obstacle warning for railborne vehicles, in particular for high-speed trains, with at least one sensor (S1, S2) provided on the railborne vehicle, ~~thereby characterized, that~~ wherein

the sensor (S1, S2) is oriented transverse to the direction of travel of the railborne vehicle (Fz), so that potential obstacles within the structural clearance in the path of travel of a vehicle (Fz) of the adjacent rail can be recognized.

2.   (currently amended) The system ~~System~~ according to Claim 1, ~~thereby characterized, that~~ wherein the sensor (S1, S2) is oriented at an angle of essentially 90° to the direction of travel of the railborne vehicle (Fz).

3.   (currently amended) The system ~~System~~ according to Claim 1 ~~or 2~~, ~~thereby characterized, that~~ wherein the sensor (S1, S2) is an optical sensor, in particular an IR-sensor and/or a radar sensor.

4.   (currently amended) The system ~~System~~ according to Claim 1 ~~one of the preceding Claims~~, ~~thereby characterized, that~~

wherein multiple sensor types are provided, of which the sensor data form the basis for evaluation.

5.   (currently amended) The system ~~System~~ according to Claim 1 ~~one of the preceding Claims~~, ~~characterized by~~ wherein at least two sensors (S1, S2), which are provided spaced apart from each other with respect to the direction of travel, and a correlation device (KO), in which a correlation of the sensor data of the two correlation (S1, S2) occurs.

6.   (currently amended) The system ~~System~~ according to one of the preceding Claims, ~~thereby characterized, that~~ wherein the railborne vehicle (Fz) operates according to the principle of rails/wheels or is magnetically levitated.

7.   (currently amended) The system ~~System~~ according to Claim 1 ~~one of the preceding Claims~~, ~~thereby characterized, that~~ wherein the sensors (S1, S2) are directed in both transverse directions of the railborne vehicle (Fz).

8.   (canceled)

9.   (new) A method for obstacle warning for railborne vehicles, in particular for high-speed trains, comprising:
        providing at least one sensor (S1, S2) on the railborne vehicle, wherein the sensor (S1, S2) is oriented

transverse to the direction of travel of the railborne vehicle (Fz), and

using said sensor to recognize potential obstacles within the structural clearance in the path of travel of a vehicle (Fz) of the adjacent rail.

10. (new) A method for evaluating the quality of the railway, for automatic recognition of land based anomalies along a railway, for inferences regarding the travel dynamic of the vehicle or for locationally fixing the vehicle, in particular for high-speed trains, comprising:

providing at least one sensor (S1, S2) on a railborne vehicle, wherein the sensor (S1, S2) is oriented transverse to the direction of travel of the railborne vehicle (Fz),

traveling along a first track adjacent to a second track, and

using said sensor to recognize the quality of said adjacent track, for automatic recognition of land based anomalies along said adjacent track, for inferences regarding the travel dynamic of the vehicle on the first track, or for locationally fixing the vehicle using geographic landmarks.